Peptidomimetics of Biologically Active Metallopeptides

ABSTRACT OF THE DISCLOSURE

The invention relates to a method of deriving a peptidomimetic of a biologically active metallopeptide, wherein the peptidomimetic includes at least one non-peptide ring structure defining a template space superimposable on a corresponding defined template space of the metallopeptide, and where the peptidomimetic further includes at least two elements independently including an amino acid residue, amino acid side chain moiety or derivative thereof, the elements defining and occupying a similar descriptor space as corresponding elements of the metallopeptide. The invention further relates to peptidomimetics with a template space heterocyclic ring structure, including 5-, 6- and 8-membered and 5-5- and 6-5-bicyclic fused ring structure melanocortin receptor-specific peptidomimetics.